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10/535,242	05/18/2005	Masuo Koyama	TAD-C560	5781
750 6628/2010 George A. Loud, Esquire BACON & THOMAS Fourth Floor 625 Slaters Lane			EXAMINER	
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## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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#### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/535,242 Filing Date: May 18, 2005 Appellant(s): KOYAMA ET AL.

> George A. Loud For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 8, 2010 appealing from the Office action mailed August 17, 2009.

## (1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1, 3-7 and 10-15.

## (4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

#### (5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief. Art Unit: 1783

### (6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

## (7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

#### (8) Evidence Relied Upon

6,716,513	HASUO et al.	04-2004
6,559,915	AMIMORI et al.	05-2003
6,265,133	TAKAHASHI et al.	07-2001

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### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 103

 Claims 1, 3-5, 7, 10, 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amimori et al. (U.S. Patent No. 6,559,915) in view of Takahashi et al. (U.S. Patent No. 6,265,133).

Regarding Appellant's claims 1 and 3, Amimori discloses a fingerprint easily erasable/removable film (col. 31, lines 17-21). The film (optical film, title) has a matted surface represented by an arithmetical mean roughness of 0.05  $\mu$ m or higher in terms of the arithmetical mean roughness R<sub>a</sub> defined in JIS B0601 (col. 10, line 53 and col. 10, line 63 through col. 11, line 20). The matted surface further has a ten point mean surface roughness R<sub>a</sub> of 0.2 to 2.0  $\mu$ m (col. 3, line 60). The film as a whole has a haze of 1.5 to 35.0% (col. 10, line 30).

Amimori fails to disclose that the surface has a wet tension of 25 mN/m or higher.

Takahashi teaches a coating which is fingerprint attachment resistant (col. 1, lines 11-16). The coating has a wet tension of 25 mN/m or higher (col. 9, lines 43-45). Furthermore, from table 2 it can be seen that if the wet tension is below 20 mN/m (comparative examples) the coating does not resist fingerprints.

It would have been obvious to one of ordinary skill in the art at the time of the invention to make Amimori's surface with wet tension of 25 mN/m or higher as disclosed by Takahashi in order to make the Amimori's film resistant to fingerprint stains.

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Regarding Appellant's claims 4 and 10, Amimori discloses the film comprises a substrate (transparent support, figure 2, reference #1, 41) and a resin layer (hard coat/low refractive index, figure 2, reference #2, 42 and #3, 43) provided on the substrate and has the matted surface as a surface of the resin layer (figure 2).

Regarding Appellant's claim 5, the limitation "the resin layer is formed from a coating material containing an ionizing radiation curable resin" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Appellant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Amimori discloses that the resin layer is curable (col. 28, lines 20-21 and col. 25, lines 52-53).

Regarding Appellant's claims 7 and 12, Amimori discloses that the resin layer contains silica particles as the matting agent (col. 16, lines 25-26).

Regarding Appellant's claims 14 and 15, fails to disclose that the resin of the resin layer has a refractive index of 1.46 to 1.52. However, where in the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges in refractive index involve only routine skill in the art, absence a showing of criticality. MPEP 2144.05 II.

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Claims 6, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 Amimori in view of Takahashi as applied above, and further in view of Hasuo et al. (U.S. Patent No. 6,716,513).

Amimori and Takahashi are relied upon as described above.

Regarding Appellant's claims 6 and 11, Amimori and Takahashi fail to disclose the resin layer contains two kinds of matting agents having different average particle diameters.

Hasuo discloses a coating for optical displays (col. 4, lines 23-43). The coating contains two kinds of silica particles having different average particle diameters (figure 1 and col. 5, lines 45-63). The coating is antifogging (col. 4, lines 7-22).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use two kinds of matting agents having different average particle diameters as taught by Hasuo in the combination of Amimori and Takahashi in order to impart antifogging.

Regarding Appellant's claim 13, Amimori discloses that the resin layer contains silica particles as the matting agent (col. 16, lines 25-26).

#### (10) Response to Argument

Appellant's arguments in the Appeal Brief filed April 8, 2010 regarding the 35
 U.S.C. 103(a) rejection over Amimori in view of Takahashi of record have been carefully considered but are deemed unpersuasive.

On pages 4-5 of the Appeal Brief, Appellant argues that differences between the prior art and the claimed invention.

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In response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

On pages 5-7 of the Appeal Brief, Appellant argues that Amimori teaches away from the allegedly obvious modification. Appellant argues that Amimori adopts the conventional approach to providing a film surface from which fingerprints may easily be removed, i.e. use of a film having a low wet tension. The film is preferably made of silicon or fluorine containing polymers, which are known to be hydrophobic and to have a very low wet tension.

As noted by Appellant the use of the use of silicon and fluorine containing polymers is only preferred and other materials are with in the scope of the invention disclosed by Amimori. Furthermore, it is unclear how the fact that the preferred materials may have a low wet tension value teaches away from the combination of Amimori and Takahashi. Appellant has failed to specifically show how modifying Amimori to have a wet tension of 25 mN/m or higher as taught by Takahashi would negatively impact the invention of Amimori.

On pages 7-8, Appellant argues that the allegedly obvious modification of Amimori would change the principle of operation of the reference. Appellant argues that the modification of Amimori would change (eliminate) the mechanism (operative principle), i.e. low wet (or "surface") tension, by which the articles of Amimori allow removal of fingerprints from a surface.

As pointed out above the materials that Appellant alleges has low wet tension are merely the preferred materials and other materials are with in the scope of the invention disclosed by Art Unit: 1783

Amimori. Amimori does not discuses that the principle of operation to removing fingerprints is limited to low wet tension, in fact Amimori is completely silent about the wet tension of the film. The fact remains that both Amimori and Takahashi disclose that fingerprints are not desirable on the films of the invention and desire film properties that make it easy to remove fingerprints. Again, Appellant has failed to specifically show how modifying Amimori to have a wet tension of 25 mN/m or higher as taught by Takahashi would negatively impact the invention of Amimori.

On pages 8-10, Appellant argues that the examiner has given no legally sufficient reason why one skilled in the art would have combined the teachings of Amimori and Takahashi.

Appellant argues that Takahashi discloses a correlation between ease of removal of fingerprints and the presence of silica particles in the coating film, but not between ease of removal of fingerprints and high wet tension.

As Appellant has pointed out Takahashi does state that if the silica particles added is less than 0.05 wt%, the mar resistance and fingerprint resistance of the coating films <u>may</u> become insufficient (col. 6, lines 19-22). Also, it is noted that Amimori uses silica particles too (col. 16, lines 25-26). Takahashi later discloses that the wet/surface tension is associated with the surfaces ability to adhere substances to the surface (col. 9, lines 43-57), e.g. fingerprints/oil marks. Therefore, it remains the examiner's position that it would have been obvious to one of ordinary skill in the art at the time of the invention to make Amimori's surface with wet tension of 25 mN/m or higher as disclosed by Takahashi in order to make the Amimori's film resistant to fingerprint stains.

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4. Appellant's arguments in the Appeal Brief filed April 8, 2010 regarding the 35 U.S.C. 103(a) rejection over Amimori in view of Takahashi and further in view of Hasuo of record have been carefully considered but are deemed unpersuasive. Art Unit: 1783

On page 10, Appellant argues that Hasuo does not cure the deficiencies of the combination of Amimori and Takahashi with regard to the providing a wet tension of 25 mN/m or more. Appellant further adds that Hasuo is neither relevant to nor properly combinable with the teaching of Amimori relating to use of silicon and fluorine containing resins as a low refractive index layer.

Appellant's arguments regarding the deficiencies of the combination of Amimori and Takahashi have already been addressed above. Appellant has failed to specifically show how modifying Amimori to use two kinds of matting agents having different average particle diameters as taught by Hasuo would negatively impact the invention of Amimori nor has Appellant specifically shown why Hasuo is improper to combine with Amimori based on the preferred materials.

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## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Alicia Chevalier/ Primary Examiner, Art Unit 1783 6/28/2010

Conferees:

/David R. Sample/ Supervisory Patent Examiner, Art Unit 1783 /Rena L. Dye/ Supervisory Patent Examiner Art Unit 1782